Written reflection in assessment and appraisal: GP and GP Trainee views

Investigators:

Dr Pamela Curtis, GP Research Fellow,

Department for Health, University of Bath, Bath, UK.

Dr Gordon Taylor, Reader in Medical Statistics,

Department for Health, University of Bath, Bath, UK.

Dr Ruth Riley, Research Support Advisor,

Department for Health, University of Bath, Bath, UK.

Dr Tom Pelly, GP Associate Postgraduate Dean

Health Education South West, School of Primary Care, Deanery House, Bristol, UK.

Dr Michael Harris, Honorary Research Fellow,

Department for Health, University of Bath, Bath, UK.

FUNDING

PC's salary from the University of Bath was funded by Health Education South West.

DISCLOSURE STATEMENT

None of the authors have any financial interest or benefit arising from the direct application of this research.

ABSTRACT

Background

In the UK, evidence of written reflection is part of licensing and revalidation for general practitioners. However, there is little evidence of specific benefits compared to other forms of reflective practice.

Aim

To seek GPs' and GP Trainees' views on the role of written reflection in learning and assessment.

Design and setting

An online survey of 1005 GPs and GP Trainees in the UK.

Method

An anonymous questionnaire containing 38 attitudinal items. Descriptive statistics were used to analyse Likert scale responses, thematic analysis for free-text responses.

Results

In total, 544 GPs and 461 GP Trainees completed the survey, with 842 (83.8%) agreeing they find verbal reflection with a colleague more useful than written reflection. Three quarters disagreed that written reflection is a way of identifying poorly performing GPs. Over 70% of respondents state that summative, written reflection is a time-consuming, box-ticking exercise which distracts from other learning. They question its validity as part of assessment and state that its use may contribute to current difficulties with recruitment and retention to general practice.

Conclusions

For many GPs, written reflection is an onerous process rather than beneficial to their learning, indicating its continued use in assessment needs to be critically examined.

Status box

What is already known in this area:

The use of written reflection for assessment, appraisal and revalidation has become mandated in British general practice. However, its use and perceived value have not been examined critically.

What this work adds:

British GPs and GP Trainees have considerable animosity toward mandatory written reflection, and this may be contributing to recruitment and retention difficulties within general practice. Respondents state that the demands of written reflection detract from other learning opportunities, and that the time-consuming, often 'tickbox' nature of their assessed written reflection reduces the time, energy and motivation to undertake other learning. The majority feel that informal verbal reflection is considerably more beneficial to them than written reflection.

Suggestions for future research:

Further work is needed to determine how individuals' views on written reflection are related to their preferred learning approaches, and to assess the feasibility of giving the option of verbal reflection as an alternative to written reflection in assessment and appraisal.

Keywords

General Practice, General Practitioner (GP), GP Trainee, Traineeship, Written Reflection, Medical Education

INTRODUCTION

Reflection has been described as 'a metacognitive process that creates a greater understanding of both the self and the situation so that future actions can be informed by this understanding' [1]. Reflection and reflective medical practice are considered essential for professional competence [2-4]. Written reflection is one of several ways of reflecting. Reflective writing is assumed to provide evidence of reflective thinking [5] and demonstrate a doctor's on-going learning. Evidence of reflective practice was therefore mandated as part of licensing and revalidation in the United Kingdom (UK) [6]. This, and the assumption that the use of reflective practice improves learning, have led to an increasing emphasis on the use of written reflection in medical education and appraisal, with electronic portfolios being used as learning and assessment tools at both undergraduate and postgraduate levels [7].

In the United Kingdom (UK), General Practice Trainees (GP Trainees) need to make frequent entries into a reflective 'learning log' which is shared with their supervisors. It is part of the workplace-based assessment component of the examination for Membership of the Royal College of General Practitioners (MRCGP) [8], the commonest route for application for eligibility to work in the UK as a General Practitioner (GP) [9].

For established GPs in the UK, the RCGP's credit-based system for Continuing Professional Development is based on a record of learning activities accompanied by a reflective record, where one hour of learning accompanied by reflection gives one learning 'credit'. These are then verified at a yearly appraisal to provide the credits that are required over a five year revalidation cycle period [10], to allow individuals to continue to work as a GP.

However, Sanders [1] recommends that the choice of approach to reflection should be determined by the learner rather than imposed, and a study on portfolio use in GP vocational training in 2004 [11] raised concerns about the acceptability of portfolio learning and called for further work to establish the role of portfolios in reflective learning. In addition, there is a

limited evidence base for electronic portfolios' educational effects [7] and acceptability to trainees [12], and also little evidence of the specific benefits from written reflection as opposed to either verbal reflection (for example through discussion with colleagues), or 'internal' reflection (reflection through thinking). The educational value of structured, mandatory reflection has been called into question [13], and there are concerns about the ethical acceptability of requiring the disclosure of personal feelings in a reflective portfolio [14]. Recent focus groups with GP Trainees and GPs found considerable negative feeling toward mandatory written reflection [15], and this study was designed to seek and quantify the views on GPs and GP Trainees on the role of written reflection in learning and assessment.

METHODS

An anonymous online questionnaire was used so that the attitudes of a large number of GPs and GP Trainees across the UK could be assessed. The questionnaire was developed using data from four focus groups from a dissertation project in 2011 [16], two further focus groups [15] and in consultation with experts in primary care and GP education. Piloting by ten GPs and GP Trainees checked feasibility and acceptability regarding survey length and content, resulting in minor adjustments.

The online survey included demographic questions and 38 statements relating to attitudes to written reflection. The response to each statement was measured using a five-point Likert scale: the response options varied from 'Strongly agree' to 'Strongly disagree'. GPs were able to make free-text comments throughout the questionnaire.

Participants had to be either a GP or GP Trainee in the UK. No financial or other incentives were offered for participation. The questionnaire was rolled out over three months, starting in the South West region and closing on 30th June 2015. Participants were recruited by invitations

forwarded by local medical committees and postgraduate deaneries, as well as by publicity through the British Medical Association, newsletters, word of mouth and social media.

Survey data were downloaded and analysed using descriptive statistics. Free-text comments were independently coded by two researchers (RR and PC) using a process of constant comparison for each of the participant responses in order to identify and analyse patterns across the dataset [17]. Codes were gradually built into broader categories or themes through comparison across participant responses, and emerging recurring themes were developed into descriptive accounts (summary statements). These themes were further refined and summarised. Responses were combined for analysis, that is 'Agree' and 'Strongly agree' were collated to represent agreement, and 'Disagree' and 'Strongly disagree' to represent disagreement. The emergent themes reflect the complexity and depth of feeling of the issues raised by respondents. The qualitative findings are therefore given primacy here and are supported by relevant statistical evidence from the survey. Likert scale responses were converted to numerical scores ('Strongly agree' = 1, 'Strongly disagree' = 5) to compare the mean responses of the GP and GP Trainee groups.

RESULTS

In total, 1005 doctors completed the survey, 544 (54.1%) GPs and 461 (45.9%) GP Trainees. Their characteristics are outlined in Tables 1-4. The age/gender mix of established GP respondents were broadly similar to that of the English national profile (Table 1). [18] A summary of the responses for each of the attitudinal statements is shown in Table 5. The mean responses for the GP and GP Trainees groups were within one position on the Likert scale for each statement, suggesting that there were no important quantitative differences in the attitudes of the two groups.

Of the 558 free-text comments made by participants, a fifth expressed positive views then qualified them with critical ones. For every respondent that was unreservedly positive about role of written reflection in learning and assessment, ten were critical of it. This proportion is reflected in the selection of participants' comments quoted below. Participants are coded by whether they were a GP or GP Trainee (GPT) and if they are a GP Trainee what year of training they are in (e.g. GPT3), a 4 digit number, whether they were male (M) or female (F) and their age band.

The value of reflection

Respondents state that they do find some form of reflection valuable, and that it is instilled in doctors early on in training and '*done naturally*':

> *I, like most doctors across all specialties, reflect on a daily basis both internally and verbally with colleagues. If fact, I don't know a doctor that doesn't. (GPT3 6521, M, 40-44 years)*

Many respondents report that '*internal*' reflection is embedded into their daily routines – at work, on the way to and from work, and at home. Some feel that reflection can help with processing thoughts and feelings, some describing it as '*therapeutic*' and '*cathartic*' in helping to process emotionally difficult situations:

> *There is not much time to reflect during the day, so it tends to occur in my own time – evenings and weekends, but this can be cathartic. (Armed forced GP 1508, F, 50-54 years)*

Over a quarter of respondents have some positive feelings in relation to written reflection: 273 (27.2%) agree with the statement '*I find written reflection valuable*', and 307 (30.6%) agree with the statement '*I find it helpful to put my reflective thoughts down in writing*'. A similar number find that the process is valuable, agreeing that writing their reflections down helps them to put problem areas into perspective (300, 29.9%, agree) and that they '*find written*

reflection particularly helpful to process aspects that affect me at an emotional level' (285, 28.4%, agree). A few respondents hypothesise that recording their reflections means it is more likely to occur, and that it may be of use to those that do not naturally reflect by forcing them to analyse the thinking process:

> *I know I'm not a natural reflector so writing things down does slow me down and make me think. (Salaried GP 6498, M, 55-59 years)*

Many respondents who state that written reflection can be useful to them are, however, critical of it in the assessment and appraisal context:

> I find written reflection useful when I actually sit down and do it, but the amount of time it takes outweighs the benefits of doing it when there is so much else to be done. (GPT3, 6382, F, 35-39 years)
>
> I find reflection useful sometimes - for some areas where subjective issues arise - when it is simply "required" it is a total waste of time. (Partner GP, 7767, M, 60-64 years)
>
> I agree written reflection is a way of identifying a failing or poorly performing GP. This however involves a huge amount of work for the majority who are not poorly performing or failing. I do not believe it represents a good use of resource. (Partner GP, 5584, M, 50-54 years)

A majority of respondents value informal approaches to reflection – by talking to friends, colleagues and family, and in group reflection on day-to-day practice; 842 (83.8%) agree that they find verbal reflection with a colleague more useful than written reflection:

I naturally reflect on events as or soon after they happen; perhaps discuss challenging situations with colleagues or friends and this is what changes my future practice, not being forced to write it down. (GPT2 9335, M, 25-29 years)

I prefer talking through problems with others rather than writing reflections- e.g. at First 5 group/ with appraiser/colleagues. I reflect on my own driving home from work. (Salaried GP 0184, F, 30-34years)

Time factors, workload and opportunity cost of written reflection

One dominant theme to emerge from participants' views is that written reflection is time-consuming: 761 (75.7%) feel the time spent doing written reflection could be used more usefully for other components of their GP workload, with 728 (72.4%) feeling that it is not a good use of their time and 693 (68.9%) agreeing that they would '*rather spend more time with patients*'. Moreover, many feel that written reflection is burdensome and a chore, with 697 (69.3%) agreeing that they resent the time spent doing written reflection:

It takes an inordinate amount of time to prepare for appraisal and I estimate that it takes me as long to write up my learning as I spend in the learning session. (Partner GP 0874, F, 45-49 years)

Some mention having no '*protected time*' for written reflection, with 648 (64.4%) agreeing that it interferes with their work-life balance.

Tickbox exercise

The term '*tickbox exercise*', impling that the activity is performed with indifference and resignation for bureaucratic purposes, is the most commonly used phrase in the free-text comments; 781 (77.7%) of respondents, including both trainers and appraisers, agree that they

see written reflection as a box-ticking exercise:

> *I am constantly reflecting on practice, completing cycles of learning. The appraisal eportfolio captures none of that. I have found appraisal to be a formulaic tick boxing exercise despite having an excellent appraiser … The process is hampered by the form filling. (Partner GP 2790, M, 30-34 years)*

GP Trainees in particular voice frustration with the frequency and volume of written reflections demanded, and 395 (85.7% of GP Trainees) agree that the quantity of written reflections required reduces their quality.

> *Occasional written reflection on particularly emotional or difficult situations is helpful, but the volume we are required to do means that I often try to shoehorn sentiment and meaning into irrelevant situations. (GPT1 5521, F, 25-29 years)*
>
> *Volume of reflection required is far too high, it makes it a box ticking exercise where you a forced to write any rubbish down just to fill the boxes (GPT1 0015, M, 30-34 years)*

In addition, 780 (77.6%) of all respondents find doing written reflection tedious. Respondents use words like '*meaningless*', '*wasteful*', '*counterproductive*' and '*onerous*' to describe it. Some also comment that enforced written reflection is '*patronising'* and '*insulting'.*

Written reflection distracting from other learning

The majority 712 (70.8%) of respondents agree that reflection in a written format distracts them from undertaking other aspects of their learning, while a minority 175 (17.4%) agrees that written reflection suits the way they like to learn. Many comment that it hampers further educational opportunities because of a mismatch with their preferred learning style:

I very much enjoy learning, it is one of the main reasons I chose this career. However reflecting puts me off! Whenever I think I might sit down with a cup of tea and flick through my BMJ I generally end up not bothering as I can't then bother with the pressure I feel to then reflect on it afterwards which I find useless. The end result is where I might have read 2 x articles I will only read one to account for reflection time. I'm extremely glad someone is finally addressing this waffle! (GPT2 5156, F, 25-29 years)

Much is made by educational theorists of 'different learning styles' and yet trainees are then expected to adhere to a very clumsy and formulaic learning tool in the from of the eportfolio, which many find lacks any value for their self development, and personally I find actually demotivates me from further self directed learning. (GPT3 6315, M, 30-34 years)

Although necessary to 'prove' ongoing learning for appraisal purposes, I sometimes feel my time would be better spent reading/ doing additional learning rather than dwelling on things already learnt. (Partner GP 8213, F, 30-34 years)

Questioning validity of written reflection as an assessment method

While just over a quarter of respondents, 283 (28.2%), agree that their written reflection is an accurate portrayal to assessors of the type of GP they are, GPs and GP Trainees comment that written reflection does not accurately reflect the capability of the doctor:

Written reflection is not an accurate representation of the quality of your work. … I believe I am good at my job but the tick box exercises of reflection do not show this – usually because I am too busy working rather than sitting down and reflecting on it. Some of my colleagues, however, have an excellent portfolio of reflection but are clinically lacking. (GPT1 5597, F, 25-29 years)

A large proportion, 720 (71.7%), disagree that reflection in a written format allows valid comparison of their learning with that of their peers, and 749 (74.5%) disagree that written reflection is a way of identifying failing or poorly performing GPs and trainees. The summative aspects of written reflection result in self-censorship, in that GPs state that they cannot always write what they feel for fear of being '*judged*', and that what is written is often self-censored to make it more acceptable to the appraiser or assessor:

> *Sometimes I don't put how I really feel because someone else reading it may be quite judgemental and it could be to my detriment. (GPT3 5740, F, 30-34 years)*
>
> *Written reflection seems to have been devalued by the 'requirement' to do it and by some assessors' fixed views on what constitutes acceptable reflection. Some of the 'reflection' I do is therefore beneficial and effective; some is a pure chore and resented - that which is done to 'satisfy requirements'. This type of reflection achieves nothing. (Partner GP 3646, M, 50-54 years)*

In addition, 641 (63.8%) have at some time written a reflection that they felt would help them '*pass*' rather than because they thought it was useful, while 427 (42.4%) admit to '*fudging*' what they write as a reflection to meet the assessment criteria. The variability in constructive feedback is highlighted by some respondents, and less than a third of respondents (303, 30.2%) agree with the statement '*The feedback I get on my written reflection is helpful*':

> *The comments from my supervisor are never useful. We both know we're playing a game. I have to reflect, he has to comment. It's just what we have to do to get me through. (GPT2 7770, M, 30-34 years)*
>
> *Different supervisors seem to want different things from reflection (some long with every box filled with prose, some shorter, brief etc) - making it difficult to demonstrate to everyone the skills/knowledge you want to. (Locum GP 5089, M, 50-54 years)*

Recruitment, retention and wider implications

Some GPs comment that their peers have been deterred from becoming GPs due to the demands of the eportfolio:

> *I know of junior doctors who have been put off training to be GPs because the focus has been so much on the eportfolio. (GPT2 0010, F, 25-29 years)*
>
> *Please release us from this ridiculous process that takes up so much time, money and morale. I would strongly suggest to hospital colleagues that they don't make the switch to GP as I have done simply because the eportfolio is unbelievable. (GPT3 4354, M, 35-39 years)*

Some are considering giving up their GP training or moving abroad, because of what they perceive as the onerous demands of the eportfolio and its requirement for written reflections:

> *If I keep getting pushed to do log entries that do not have any meaning to me or the people reading them and being judged on them when they do not in any way reflect how good a doctor I am, I will strongly consider moving abroad to be able to continue enjoying my career. (GPT1 4123, F, 25-29 years)*
>
> *Reflection is a complete waste of time, a good recruitment driver for Australia. If the country wants GPs to stay, this process must be streamlined. (GPT1 8411, M, 40-44 years)*

Some experienced GPs report being so '*fed up*' with what they feel is '*hoop-jumping*' that they are actively considering leaving the profession:

As you can see I HATE HAVING TO DO THIS WRITTEN REFLECTION and am cross, it is causing some very good colleagues to retire early!! (Partner GP 4235, M, 60-64 years)

If you want to encourage older GPs to continue to work for the NHS [National Health Service] then you need to streamline appraisal hoops significantly. Several of my peers walked away completely as they could not be bothered to jump through the hoops. I will probably appraise one more time then bin clinical work (Locum GP 2236, F, 60-64 years)

I resent the Big Brother approach to my learning and intend to leave the profession. (Locum GP 4835, F, 55-59 years)

The 'Clarity' toolkit makes you reflect on reflection and then reflect again I am fed up and bored with it …after 31 full time working years [written reflection] has made me feel less confident more anxious and am now retiring early at 55. (Partner GP 3627, F, 50-54 years)

Finally, 165 (16.4%) agree with the statement '*I feel the culture within the medical community regarding written reflection is positive*':

I have noted that many of my colleagues and senior peers feel written reflection is merely an inevitable box-ticking exercise. But if we all find it an unsatisfactory method of learning and assessing learning, then surely it must be changed? (GPT3 9885, F, 30-34 years)

DISCUSSION

SUMMARY

In this study, the majority of GPs and GP Trainees surveyed consider that mandatory written reflection is neither helpful nor valuable. They report that written reflection is time consuming and is having an adverse impact on other learning opportunities as well as on their work-life

balance. These factors cause resentment of the process and are cited as a reason by some GPs and GP Trainees for considering leaving their careers early. The comments and feelings expressed by survey participants in their free-text comments are predominantly negative, and communicate a range of feelings, including anger, resentment and frustration about the obligatory written reflection process.

Examiners and appraisers ask for written reflection as it is felt to provide evidence of reflective thinking and demonstrate a doctor's on-going learning. In spite of this, many respondents view the mandatory written reflection process as a pointless and arduous process. While there were no differences between the GP and GP Trainee groups in the quantitative analysis, the qualitative analysis suggested that GP Trainees are more resentful of the frequency and volume of written reflection required of them. Many GP Trainees argue that the quantity dilutes the quality that would be necessary for the process to be meaningful. Crucially, many respondents feel that the portfolio requirements prevent GP Trainees from spending time on other learning, with some GP Trainees considering leaving their training because of the perceived onerous demands of the eportfolio.

Several of the survey respondents indicate that written, assessed reflection fails its objectives, principally because GPs feel inhibited from being open and honest about their reflections. They argue that it is an unsuitable method for enabling GPs to communicate openly about complex situations, experiences and feelings. For some respondents, the experience of having formal assessed written reflections places them under considerable scrutiny which is stressful, demoralising and demotivating.

However, there are some respondents for whom being asked to provide written reflection appears to be beneficial, and an evaluation of written reflection may currently be the easiest way for external assessors to seek proof that individuals practice reflectively.

STRENGTHS AND LIMITATIONS

The survey questions were derived from a qualitative analysis of focus groups with GPs and GP Trainees. Two phases of piloting were undertaken to ensure face validity. The questionnaire contained a balanced number of positive and negative statements. The study elicited the views of a large number of both GP Trainees and GPs. While responses were sought from across the UK, there were few participants from some regions and we are unable to state an overall response rate due to the multiple recruitment methods used. Because of this, the views of respondents may not have reflected that of the GP and GP Trainee population, as it is possible those least satisfied with the process of written reflection were most motivated to complete the survey and make their views known.

The questionnaire allowed participants to explain their responses through free-text entries. The online format allowed individuals to express their views freely without fear of being identified, but due to this it was not possible to seek respondent validation. However, the high level of agreement between the quantitative and qualitative responses increases confidence in the analysis. An independent thematic analysis of free-text responses was made to reduce the potential for researcher bias. Whilst the voluntary, self-selecting nature of the survey participation may have resulted in selection bias in favour of those that are not happy with written reflection, some free-text responses suggest that respondents incorrectly assumed that their negative views would be in the minority.

COMPARISON WITH THE EXISTING LITERATURE

Many of the survey respondents indicate that appraisal of written reflection fails its objectives, principally because they feel inhibited from being open and honest in their reflections. The risk that assessment of written reflection may be counterproductive was recognised by Pee et al

[19], before the widespread introduction of formal written reflection in portfolios. Some respondents feel demoralised by the reflective writing process and some indicate it may be contributing to workforce shortages. This is consistent with the findings of a recent study on the reasons that GPs leave practice early, in which 37% of early GP leavers stated that concerns about appraisal and revalidation were one of the reasons for their having left practice, with 29% stating that the high workload required for the yearly NHS appraisal was a factor [20] .

Respondents commented positively on verbal reflective discussion, but questioned the value of writing it down. This is consistent with recent evidence that there is no additional benefit from a written component being added to a debrief discussion [21]. Whilst the principles of reflection are felt by respondents to be important, our survey of GPs and GP Trainees suggests that most do not find written reflection to be useful, and that it may be detrimental to other learning. This is consistent with cognitive load theory, which suggests that: *'Principles that work well for novice learners may not work well or may even have negative effects for more experienced learners'* [22].

IMPLICATIONS FOR RESEARCH AND/OR PRACTICE

The use of written reflection for assessment has become ubiquitous in UK general practice. However, its use has not previously been examined critically, and one respondent refers to it as '*The Emperor's new clothes*'. While the RCGP acknowledges that GPs have different learning styles and needs [10], current assessment processes demand submission of written reflections. This study indicates that, for the majority of respondents, the written reflection process is an onerous obligation rather than a genuine opportunity to share and reflect on their learning and clinical experiences.

Most respondents indicate that they value reflective practice, supporting the notion that reflective practice remains a central component of GPs' and GP Trainees' development, but a majority feel that verbal reflection is more beneficial to them than written reflection. This suggests that assessors should consider how they can support verbal reflection as a means of engaging with the medical workforce and of encouraging learning, rather than the current systems which appear to demoralise and frustrate a majority of their users.

Obligatory written reflection as part of the licensing and revalidation processes appears to be one of many factors negatively impacting the GP workforce's continuing professional development, its morale, as well as recruitment and retention. The views and experiences of many GP and GP Trainee respondents suggest that the use of written reflection as a tool to assess and demonstrate competency is limited in value. This study focussed on the views of GPs and GP Trainees, and work is needed to find out what their supervisors and assessors see as the role of reflection. While a large majority of the surveyed GPs and GP Trainees feel that written reflection does not offer an effective and valuable means of identifying failing or poorly performing GPs, research is needed to find out whether their appraisers, examiners and teachers would agree with this, and specifically whether there is a link between 'poor' or absent written reflection and poor performance. Further research is also needed into what alternatives to obligatory written reflection would be acceptable to GPs and GP Trainees, whether these would be feasible, and whether they would give adequate evidence of learning and competence to their examiners and appraisers. However, the overwhelming lack of support for obligatory written reflection from its users indicates that its validity as a tool for assessment of performance and learning of qualified doctors is in doubt.

ETHICS

The study design was reviewed for ethical integrity by the Research Ethics Advisory Approval Committee for Health at the University of Bath. REACH reference number: EP 14/15 13.

COMPETING INTERESTS

None declared

ACKNOWLEDGEMENTS

The study team would like to thank to all the GPs and GP Trainees that contributed to the study.

REFERENCES

1. Sandars J. The use of reflection in medical education: AMEE Guide No. 44. Med Teach. 2009;31(8):685-95.

2. Mann K, Gordon J, MacLeod A. Reflection and reflective practice in health professions education: a systematic review. Adv Health Sci Educ. 2009;14(4):595-621.

3. Boud D, Keogh R, Walker D. Reflection : turning experience into learning. Boud D, Keogh R, Walker D, editors. London: Kogan Page; 1987.

4. Schön DA. The reflective practitioner : how professionals think in action. Aldershot: Ashgate; 1991.

5. Effective Learning Service QMU. What is reflection - Reflection 2014.pdf Edinburgh2015 [Available from: http://www.qmu.ac.uk/els/docs/Reflection 2014.pdf.

6. Council GM. Revalidation: what you need to do - summary guidance for regulators - Revalidation___What_you_need_to_do.pdf_54286567.pdf 2015 [Available from: http://www.gmc-uk.org/static/documents/content/Revalidation___What_you_need_to_do.pdf_54286567.pdf.

7. Buckley S, Coleman J, Davison I, Khan KS, Zamora J, Malick S, et al. The educational effects of portfolios on undergraduate student learning: A Best Evidence Medical Education (BEME) systematic review. BEME Guide No. 11. Med Teach. 2009;31(4):340-55.

8. RCGP. Learning Log for MRCGP Workplace Based Assessment 25/11/13 [Available from: http://www.rcgp.org.uk/training-exams/mrcgp-workplace-based-assessment-wpba/learning-log.aspx.

9. RCGP. Entry to the GP register 2015 [Available from: http://www.rcgp.org.uk/training-exams/entry-to-gp-the-register.aspx.

10. RCGP. RCGP Guide to the Credit-Based System for CPD Version 3.0. London: Royal College of General Practitioners; 2013.

11. Pearson DJ, Heywood P. Portfolio use in general practice vocational training: a survey of GP registrars. Med Educ. 2004;38(1):87-95.

12. Charlton R, Thistlethwaite J, Coomber J, Johnson N. RCGP Revalidation pilots: England and Wales. The University of Warwick; 2010.

13. Driessen E. Do portfolios have a future? Adv in Health Sci Educ. 2016.

14. Ghaye T. Is reflective practice ethical? (The case of the reflective portfolio). Reflective Practice: International and Multidisciplinary Perspectives. 2007;8(2):151-62.

15. Curtis P, Taylor G, Harris M, editors. Poster 356: Written reflection: Is it valuable or is it a game? RCGP Annual Primary Care Conference 2015: Expanding horizons of care; 2015; SECC Glasgow.

16. Griffiths G. A focus group study to explore General Practitioners' perceptions of reflective practice [Dissertation]. 2011.

17. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006;3(2):77-101.

18. Health and Social Care Information Centre. General and Personal Medical Services, England - 2002-2012. 2013.

19. Pee B, Woodman T, Fry H, Davenport ES. Appraising and assessing reflection in students' writing on a structured worksheet. Med Educ. 2002;36(6):575-85.

20. Doran N, Fox F, Taylor G, Harris M. Early GP Leavers Interim Report to HEE & NHS England. University of Bath, 2014.

21. Reed SJ. Written debriefing: Evaluating the impact of the addition of a written component when debriefing simulations. Nurse Educ Pract. 2014.

22. van Merrienboer JJG, Sweller J. Cognitive load theory in health professional education: design principles and strategies. Med Educ. 2010;44(1):85-93.

TABLES

Table 1 – Gender and age of GPs and GP Trainees and comparison with data for England [18]

	Number of GP respondents n (%)	*Number of GPs in England n (%)*	Number of GP Trainee respondents n (%)	*Number of GP Trainees in England n (%)*
Gender				
Female	281 (51.6)	*16,723 (47.1)*	273 (59.2)	*2,832 (64.0)*
Male	263 (48.4)	*18,804 (52.9)*	188 (40.8)	*1,594 (36.0)*
Age (years)				
≤34	36 (6.6)	*4,389 (12.4)*	353 (76.6)	Data not available
35–44	142 (26.1)	*10,920 (30.7)*	94 (20.4)	
45–54	223 (41.0)	*12,205 (34.4)*	13 (2.8)	
55–64	134 (24.6)	*6,534 (18.4)*	0	
≥65	9 (1.7)	*1,453 (4.1)*	1 (0.2)	

Table 2 – Usual NHS region of work of GPs and GP Trainees

	GPs (%)	GP Trainees (%)
Armed Forces	28 (5.2)	2 (0.4)
England	418 (76.8)	444(96.3)
Northern Ireland	3 (0.6)	1 (0.2)
Scotland	60 (11.0)	10 (2.2)
Wales	35 (6.4)	4 (0.9)

Table 3 – Main roles of GP respondents/ year of training of GP Trainees

GP Main role (%)		GP Trainee year (%)	
Locum	46 (8.7)	ST1	140 (30.3)
Out of hours	5 (0.9)	ST2	169 (36.4)
Partner	386 (70.9)	ST3	144 (31.2)
Salaried	93 (19.0)	ST4	5 (1.3)
Other	14 (0.6)	*Missing data*	5 (1.3)

Table 4– Days worked by GPs and GP Trainees per week

Days worked per week	GPs (%)	GP Trainees (%)
≤2	110 (20.2)	25 (5.4)
3-4	365 (67.1)	235 (51.0)
≥5	69 (12.7)	201 (43.6)

Table 5 – Questions on written reflection and Likert scale responses

Questionnaire	Strongly Disagree n (%)	Disagree n (%)	Unsure n (%)	Agree n (%)	Strongly Agree n (%)
1) The time I spend doing written reflection could be used more usefully for other components of my workload as a GP	20 (2.0)	154 (15.3)	70 (7.0)	308 (30.6)	453 (45.1)
2) Written reflection is useful to consolidate my learning	231 (23.0)	308 (30.6)	136 (13.5)	288 (28.7)	42 (4.2)
3) I find it helpful to put my reflective thoughts down in writing	265 (26.4)	339 (33.7)	94 (9.3)	261 (26.0)	46 (4.6)
4) I resent the time spent doing written reflection	48 (4.8)	187 (18.6)	73 (7.3)	344 (34.2)	353 (35.1)
5) Writing my reflections down helps me put problem areas into perspective	220 (21.9)	360 (35.8)	125 (12.4)	253 (25.2)	47 (4.7)
6) Written reflection helps me make changes to the way I practice	260 (25.9)	375 (37.3)	114 (11.3)	223 (22.2)	33 (3.3)
7) I find written reflection particularly helpful to process aspects that affect me at an emotional level	276 (27.5)	351 (34.9)	93 (9.2)	222 (22.1)	63 (6.3)
8) I see written reflection as a box ticking exercise	41 (4.1)	126 (12.5)	57 (5.7)	309 (30.7)	472 (47.0)

9) I find having to write my reflections down stressful	75 (7.5)	341 (33.9)	88 (8.7)	300 (29.9)	201 (20.0)
10) I feel the culture within the medical community regarding written reflection is positive	210 (20.9)	447 (44.5)	183 (18.2)	150 (14.9)	15 (1.5)
11) I find writing my reflection down is a good use of my time	377 (37.5)	351 (34.9)	108 (10.8)	147 (14.6)	22 (2.2)
12) I find written reflection valuable	272 (27.1)	324 (32.2)	136 (13.5)	240 (23.9)	33 (3.3)
13) Written reflections focus in too specifically, as a GP I want a broader overview	35 (3.5)	329 (32.7)	282 (28.0)	292 (29.1)	67 (6.7)
14) I feel the quantity of written reflections I have to produce reduces their quality	24 (2.4)	162 (16.1)	82 (8.2)	352 (35.0)	385 (38.3)
15) My written reflection is an accurate portrayal to assessors of the type of GP I am	269 (26.8)	300 (29.8)	153 (15.2)	253 (25.2)	30 (3.0)
16) Being forced to reflect in a written format distracts me from other aspects of my learning	39 (3.9)	185 (18.4)	69 (6.9)	327 (32.5)	385 (38.3)
17) Written reflection suits the way I like to learn	369 (36.7)	362 (36.0)	99 (9.9)	150 (14.9)	25 (2.5)
18) I would do written reflection even if it were not compulsory	437 (43.5)	324 (32.2)	104 (10.4)	118 (11.7)	22 (2.2)

19) Having to do written reflection interferes with my work-life balance	44 (4.4)	214 (21.3)	99 (9.9)	315 (31.3)	333 (33.1)
20) Written reflection is a valid form of evidence to assess my learning	223 (22.2)	324 (32.2)	153 (15.2)	276 (27.5)	29 (2.9)
21) Reflection in a written format allows valid comparison of my learning with that of my peers	290 (28.9)	430 (42.8)	165 (16.4)	111 (11.0)	9 (0.9)
22) I actively avoid writing about things that I might be criticised or disciplined for	111 (11.0)	491 (48.9)	126 (12.5)	212 (21.1)	65 (6.5)
23) I am more likely to write about things that have not gone well than things that have gone well	48 (4.8)	279 (27.8)	121 (12.0)	456 (45.4)	101 (10.0)
24) I find it helpful to look back at my written reflection at a later date	326 (32.4)	369 (36.7)	102 (10.2)	185 (18.4)	23 (2.3)
25) I find doing written reflection is tedious	33 (3.3)	135 (13.4)	57 (5.7)	339 (33.7)	441 (43.9)
26) I sometimes ‘fudge’ what I write as a reflection to meet the assessment criteria	91 (9.1)	381 (37.9)	106 (10.6)	306 (30.4)	121 (12.0)
27) I feel it is positive that writing reflections helps all GPs to think and learn in the same way	366 (36.4)	460 (45.8)	108 (10.7)	66 (6.6)	5 (0.5)

28) The structure of the written reflection tool can prevent me from writing about something important	32 (3.2)	233 (23.2)	171 (17.0)	363 (36.1)	206 (20.5)
29) I sometimes write a reflection that I know will help me 'pass' rather than because I think it is useful	47 (4.7)	238 (23.7)	79 (7.8)	415 (41.3)	226 (22.5)
30) The feedback I get on my written reflection is helpful	147 (14.6)	349 (34.7)	206 (20.5)	271 (27.0)	32 (3.2)
31) I do not know what is expected of me regarding my written reflection	72 (7.2)	489 (48.6)	130 (12.9)	244 (24.3)	70 (7.0)
32) I find verbal reflection with a colleague more useful than written reflection	9 (0.9)	70 (7.0)	84 (8.3)	383 (38.1)	459 (45.7)
33) I tend to write my written reflections at the last minute (just before they are due to be assessed)	86 (8.6)	399 (39.7)	93 (9.2)	295 (29.4)	132 (13.1)
34) I usually write my reflections within a few days of an event happening	100 (10.0)	386 (38.4)	71 (7.0)	395 (39.3)	53 (5.3)
35) I keep a brief list which I refer back to when I write up my written reflections	121 (12.0)	270 (26.9)	56 (5.5)	474 (47.2)	84 (8.4)

36) I feel written reflection is a way of identifying failing/ poorly performing GPs	407 (40.5)	342 (34.0)	143 (14.2)	90 (9.0)	23 (2.3)
37) Doing written reflection helps me identify gaps in my knowledge	291 (29.0)	373 (37.1)	104 (10.3)	217 (21.6)	20 (2.0)
38) I would rather spend more time with patients than doing written reflection	30 (3.0)	157 (15.6)	125 (12.5)	327 (32.5)	366 (36.4)